

Review

Outdoor Learning in Europe: A Comparative Analysis of Selected Initiatives for Personal and Social Development

Rubén Navarro-Patón ¹, Martín Barcala-Furelos ², Miguel Cons-Ferreiro ¹, Almudena González-Costas ³,
Helena Sofia Rodrigues ⁴, Jorge Esparteiro Garcia ⁴, Vitor Leilo Da Silva Braga ⁵, Wellington Alves ⁵ and
Marcos Mecías-Calvo ^{1,*}

¹ Faculty of Teacher Training, Universidade de Santiago de Compostela, 27001 Lugo, Spain; ruben.navarro.paton@usc.es (R.N.-P.); miguel.cons@usc.es (M.C.-F.)

² Faculty of Educational Sciences, Universidade de Santiago de Compostela, 15782 Santiago de Compostela, Spain; martin.barcala@usc.es

³ Femxa Formación SLU, 36204 Vigo, Spain; agcostas@femxa.com

⁴ ADiT-Lab, Instituto Politécnico de Viana do Castelo, 4900-347 Viana do Castelo, Portugal; sofia.rodrigues@esce.ipv.pt (H.S.R.); jorgegarcia@esce.ipv.pt (J.E.G.)

⁵ CIICESI-Escola Superior de Tecnologia e Gestao, Instituto Politécnico de Porto, Rua do Curral, 4610-156 Felgueiras, Portugal; vbraga@estg.ipp.pt (V.L.D.S.B.); wal@estg.ipp.pt (W.A.)

* Correspondence: marcos.mecias@usc.es

Abstract

Outdoor learning has been used in different European contexts to support personal and social development. However, the ways in which these initiatives are organised and implemented can vary according to the target group, the educational purpose, and the local context. The aim of this study was to comparatively analyze selected Outdoor Learning initiatives for young people and adults in Europe, focusing on their main characteristics and on the forms of development they promote. A qualitative exploratory review was carried out using websites of educational networks, NGOs, training centers, and institutional projects. Seven initiatives were selected from an initial set of 27 cases identified through the search process. The selected initiatives were Venture Trust, Venture Out, Forest School, KOA Aventura, Moc Warmii, Die Seminarschneider, and LIFE Trekking. The results show a diversity of program durations, pedagogical approaches, and participant profiles, but also some common elements, such as experiential learning, reflection, cooperation, and contact with nature. The analysis suggests that Outdoor Learning initiatives may support different forms of personal and social development, although their design and aims are strongly influenced by the context in which they are developed.

Keywords: outdoor learning; personal and social development; youth and adults; comparative analysis; European programmes



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1. Introduction

Historically, the natural environment has been conducive to the holistic development of human beings (Mann et al., 2022), to the point of being incorporated into teaching and learning processes through leisure activities for young people and adults from different social strata (Puhakka, 2024). Outdoor learning has its roots in traditional European schools, such as the British Forest Schools (Garden & Downes, 2023), the Nordic Friluftsliv (Sjödin et al., 2024), and the Swedish I Ur och Skur (Änggård, 2012). Since the 16th century, it has evolved, fostering the interrelationship between nature and human beings through

physical and exploratory activities (Freeman & Seaman, 2020). The reasons that drove the development of Outdoor Learning were diverse (Hernandez, 2024); on the one hand, the growing industrialization of the 19th century distanced people from natural spaces, generating concern about its effects on physical and mental health (Sato & Sakamoto, 2025), and on the other hand, the criticism of traditional educational systems, perceived as excessively theoretical and disconnected from real life (Waite, 2020), fostered the establishment of the bases for the development of alternative pedagogical proposals that reintegrated natural environments into educational processes (Fang et al., 2023). Thus, outdoor learning is considered a pedagogical alternative that integrates experiences in the natural environment as the central axis of the learning process (Hernandez, 2024), which can be complemented by the use of other non-formal spaces such as parks, museums, or historical buildings (Aylward et al., 2025). A comparative analysis of outdoor learning practices supports an analysis of key elements of this pedagogical practice (Remmen & Iversen, 2023).

Outdoor learning is based on a series of essential principles that guide its implementation (Jucker & von Au, 2022). These include experiential learning (Mann et al., 2022), which emphasizes the importance of direct contact with the environment for cognitive and emotional development (Jucker & von Au, 2022); a learner-centered approach, where the learner is the active protagonist of their own learning process (Aylward et al., 2025); and interdisciplinarity (Aylward et al., 2025), which leverages outdoor spaces as integrative contexts where diverse areas of knowledge converge (Jucker & von Au, 2022). This combination of variables, along with group work and cooperation, enriches the participants' learning process and contributes to their holistic development (Kiviranta et al., 2024).

This model has proven effective in three dimensions—physical fitness development; mental health; and personal development and emotional intelligence (Baena Extremera et al., 2025; Nugraha et al., 2024)—highlighting the educational, emotional, psychological, social, and physical benefits of outdoor learning (Kiviranta et al., 2024; Waite, 2020). Outdoor Learning is applied in different ways across educational and social contexts, and its meaning can vary according to local traditions, target groups, and institutional purposes (Mann et al., 2022). For this reason, it is useful to compare selected initiatives from different countries in order to understand their main pedagogical features, their common elements, and the ways in which they are adapted to specific contexts (Ma et al., 2024).

For all the reasons stated above, the objective of this study was to comparatively analyze selected Outdoor Learning initiatives for young people and adults in Europe, focusing on how they promote personal and social development across different contexts.

2. Materials and Methods

This study adopted a qualitative exploratory approach based on a comparative review of selected Outdoor Learning initiatives. The purpose of this approach was to identify and compare initiatives developed in different European contexts, focusing on their main pedagogical characteristics, participant profiles, and forms of personal and social development.

2.1. Procedures

Websites of educational networks, Non-Government Organisations (NGOs), training centers, and institutional projects were consulted to identify selected Outdoor Learning initiatives. The search was carried out using predefined keywords in Spanish and English, including terms related to outdoor learning, educational initiatives, programs, schools, and successful practices. The search focused on non-academic online sources, such as institutional portals, initiative reports, pedagogical dissemination platforms, and alternative training programs linked to ministries, NGOs, nature education centers, and teacher

communities. Only projects with a clear educational orientation and publicly available information were considered.

2.2. Information and Search Sources

An online research methodology was applied, based on the following sources: official websites of educational networks and entities linked to outdoor learning (i.e., European Schoolnet, Learning through Landscapes); pedagogical dissemination media (i.e., Edutopia, Outdoor Classroom Day, TeachOutdoors); digital publications on outdoor pedagogy; and archives of local, national, and global initiatives.

The search strategy (Table 1) included seven categories of keywords associated with outdoor learning projects (Initiatives; Experiences; Programs; Schools; Best Practices).

Table 1. Keywords used in Spanish and English.

Search Terms in Spanish	Search Terms in English
Proyectos locales de aprendizaje al aire libre en (país)	Local outdoor learning projects in (country)
Iniciativas escolares autónomas de educación exterior	Independent outdoor education initiatives in schools
Experiencias no colaborativas de enseñanza en la naturaleza	Case studies of non-collaborative outdoor learning
Programas independientes de educación al aire libre	Independent outdoor education programs
Escuelas pioneras en metodologías outdoor sin alianzas	Best practices for outdoor learning in individual schools
Evaluación de proyectos educativos al aire libre	Evaluation of local outdoor learning initiatives
Prácticas exitosas en educación exterior sin consorcios	Successful outdoor education without consortia

2.3. Inclusion and Exclusion Criteria

The following inclusion criteria were applied: the initiative had to be clearly connected to Outdoor Learning; it had to be aimed at young people and/or adults; it had to show an educational or developmental purpose; it had to be based in Europe; and it had to provide enough public information to allow comparison. In addition, when several initiatives were found from the same country, only one was retained to ensure greater geographical diversity in the final sample. Projects without reliable public documentation, with unclear educational aims, or with insufficient information for analysis were excluded.

2.4. Data Extraction

Once the search was completed, the following information was selected: project name; years in which it was implemented; country where it was carried out; age of the participants; duration of the program; purpose of the experience; summary of the experience and website.

3. Results

The following section presents the Outdoor Learning initiatives selected for this comparative analysis, highlighting their main characteristics and contexts. After applying the inclusion and exclusion criteria, 27 initiatives were initially identified. Of these, some were excluded because they did not provide sufficient information, did not fit the educational focus of the study, or did not meet the selection criteria. From the remaining initiatives, one case per country was selected to ensure a broader geographical distribution and to allow a more balanced comparison across contexts. This allowed the analysis to include different territorial realities and methodological approaches.

From the initial set of 27 initiatives, 3 were excluded due to insufficient documentation, 2 because the educational purpose was not clear, and 2 because another initiative from the same country was already selected. Table 2 presents the key information for each selected initiative, including the title, implementation period, country, target group, duration, main focus, summary, and source.

Table 2. Selected Outdoor Learning initiatives included in the comparative analysis.

Initiative	Period	Country	Target Group	Duration	Main Focus	Summary	Source
<i>Venture Trust</i>	1982–2024	Scotland	16–25 years	3–6 months	Personal development, confidence, resilience, and social reintegration	Outdoor learning programme for vulnerable young people using hiking, orienteering, climbing, canoeing, canyoning, and survival skills in residential and weekly sessions.	Official website: https://www.venturetrust.org.uk (accessed on 20 November 2025)
<i>Venture Out</i>	2016–2025	Ireland	12–35 years	1–2 weeks with long-term interventions	Well-being, therapeutic support, and personal growth	Nature-based outdoor learning and therapeutic programmes for people facing different life challenges, including individual support, community groups, youth leadership, and team building).	Official website: https://www.venture-out.ie (accessed on 20 November 2025)
<i>Forest School</i>	2017–2026	Portugal	<15 years	1 year	Holistic development through exploration and free play.	Outdoor learning initiative inspired by the Forest School model, focused on social, emotional, and motor development through nature-based exploration, sensory interaction, and child initiative.	Official website: https://www.forestschoolorpatastenras.pt (accessed on 20 November 2025)
<i>KOA Aventura</i>	2019–2023	Spain	12–18 years	1 week annual with weekly sessions	Peer relationships, emotional management, and self-awareness.	Adventure-based outdoor learning programme for at-risk adolescents combining micro-adventures, expeditions, cooperative games, and reflective sessions.	Official website: https://www.koaprogramme.org/sobre-el-programa (accessed on 20 November 2025)
<i>Moc Warmii</i>	2020–2025	Poland	25+ years	7 months	Skills development and employability.	Outdoor learning and skills workshop programme for unemployed adults, including assessment, outdoor experiences, mentoring, and validation of acquired skills.	Official website: https://ciedu.eu/moc-warmii/ (accessed on 20 November 2025)
<i>Die Seminarschneider</i>	2020–2026	Germany	18+ years	Flexible/continuing education	Social skills, leadership, and personal effectiveness.	Indoor and outdoor training programmes for adults using challenges, problem-solving, cooperation, and reflection to support transferable workplace skills.	Official website: https://dieseminarschneider.de (accessed on 20 November 2025)
<i>LIFE Trekking</i>	2023–2024	Finland	18+ years	10 days	Leadership and emotional management.	Hiking-based outdoor learning experience in Finnish Lapland combining physical activity, silence, guided reflection, to promote self-awareness and resilience.	Official website: https://www.lifeleadershipschool.com/ (accessed on 20 November 2025)

Across the selected cases, the initiatives showed differences in duration, target group, and pedagogical orientation, but they also shared some common elements. These included the intentional use of natural environments as learning spaces, physical and adventure activities adapted to the participants, group work and cooperation, and guided reflection focused on self-knowledge and transfer of learning.

All the selected initiatives apply Outdoor Learning to develop the personal and social potential of their participants. Geographically, all the projects took place in Europe (Poland, Ireland, Scotland, Finland, Germany, Portugal, and Spain). The natural environments where outdoor learning is implemented are diverse, ranging from remote locations such as Lapland in Finland (LIFE Trekking), forests and rural areas of Warmia in Poland (Moc Warmii), to accessible natural areas near Barcelona in Spain for micro-adventures (KOA Aventura). The target groups ranged from children and young people under 18 to adults up to 35 years old, with a primary focus on vulnerable populations. Forest School focuses on children under 15 (childhood and adolescence); KOA Aventura and Venture Trust work with teenagers and young adults (youth and early adulthood); and Die Seminarschneider and LIFE Trekking are specifically aimed at adults.

Regarding the purpose of the experiences, the initiatives can be classified according to their focus and target audience. Venture Trust, KOA Aventura, and Moc Warmii aim at social inclusion and are geared towards people in situations of social, educational, or employment vulnerability. Venture Out and LIFE Trekking have a therapeutic and well-being focus, prioritizing emotional and mental health, as well as personal growth. Forest School has a pedagogical orientation centered on holistic development. Die Seminarschneider and LIFE Trekking are oriented towards professional development and leadership through the acquisition of skills transferable to the workplace.

The duration of the programmes is heterogeneous and varies according to the purpose of the experience and the needs of the participants, ranging from weeks and months to years and ongoing training. Forest School (1 year), Venture Trust (3–6 months), and Moc Warmii (7 months) are designed as long-term programmes that seek deeper and more sustained change in educational or social inclusion contexts. Other initiatives are designed with a medium or modular duration, such as KOA Aventura, which combined an intensive week with weekly sessions throughout the year, and Venture Out, which integrated short experiences within a longer process. Finally, there are intensive or short-term experiences such as LIFE Trekking (10 days), or some of the training courses offered by Die Seminarschneider, which focus on immersive experiences with high emotional and reflective intensity.

The activities used in the programmes include group dynamics, guided reflection, coaching, hiking, skills workshops, and personal and social impact assessments, with an emphasis on developing resilience, leadership, and well-being. The activities vary according to age, purpose, and duration; however, all the initiatives shared the idea of Outdoor Learning as an educational process based on action, experience, and reflection in nature.

Venture Trust, KOA Aventura, and Moc Warmii (transformative orientation) feature activities focused on adventure and nature experiences, such as hiking, climbing, kayaking, orienteering, night expeditions, and basic survival skills, fostering progressive physical and emotional challenges for participants. These activities are complemented by spaces for reflection and support, designed to promote confidence, resilience, emotional management, and personal responsibility. The medium-to-long duration of these programmes (from several months to a year) allows for continuous follow-up and greater transfer of learning to daily life, education, or work. In contrast, Forest School (pedagogical orientation) features activities based on free play, exploration of the natural environment, and sensory

interaction. Unlike adventure programmes aimed at older populations, these activities are not presented as high-risk challenges, but as opportunities for motor, emotional, and social development through participant initiative. The extended duration of the programme (one year) contributes to the consolidation of meaningful learning and holistic development.

Die Seminarschneider and LIFE Trekking (professional orientation) use nature and adventure activities geared toward developing transferable skills, leadership, and personal effectiveness. In these cases, the activities include cooperative challenges, outdoor problem-solving, immersive micro-adventures, and trekking expeditions in demanding natural environments. These experiences are structured through a methodological sequence that combines action, guided reflection, and transfer of learning to the professional sphere. The shorter duration of these programmes, especially in the case of LIFE Trekking with its ten intensive days, is balanced by a high level of experiential intensity.

Across all initiatives, some common elements can be observed, with varying emphasis: intentional use of the natural environment as an educational space; physical and adventure activities adapted to the age and abilities of participants; group work and cooperation; and spaces for reflection focused on self-knowledge and transfer of learning. These activities are used as training tools that seek to respond both to programme objectives and to the characteristics of the target population, with variations according to the time frame. Long-term programmes tend to integrate initial diagnostic processes, ongoing support, and validation of skills, while short-term programmes prioritise intensive experiences.

4. Discussion

The aim of this study was to comparatively analyze selected Outdoor Learning initiatives for young people and adults in Europe, focusing on how they promote personal and social development across different contexts. According to scientific evidence, the selected projects reflect that outdoor learning is conceived as a holistic process that combines action, interaction with the natural environment, and reflection (Mann et al., 2022). In general, the results demonstrate the versatility of outdoor learning as an effective tool and a good practice for the comprehensive development of its users (Aylward et al., 2025), regardless of their age or social status (Nugraha et al., 2024; Remmen & Iversen, 2023). This versatility could be attributed to the flexibility of outdoor learning and its ability to adapt to different contexts, life stages, and social needs (Nugraha et al., 2024). In this sense, a series of common principles were identified in all programs regardless of the population they were aimed at or their purpose: experiential learning, personal development, cognitive and emotional development (Vlček et al., 2025), and the interdisciplinary combination of other training activities that can be merged with the natural environment (Klopčič & Torkar, 2025).

The comparison of the selected initiatives suggests that Outdoor Learning can take different forms depending on the age of participants, the purpose of the programme, and the local context. Across the cases, some common elements were found, such as experiential learning, cooperation, reflection, and contact with nature.

These findings may be useful for educators, programme designers, and organisations that work with outdoor learning. The comparison shows that outdoor learning initiatives can be adapted to different age groups and educational purposes, from personal development and well-being to leadership and employability. This may help practitioners think about how to design activities that combine experience, reflection, and group interaction in a way that fits the needs of their participants.

The results show the different approaches and purposes that Outdoor Learning programs can have—Pedagogical (Forest School), Transformative (Venture Trust, KOA Aventura, Moc Warmii) and Professionalizing (Die Seminarschneider, LIFE Trekking)—and the

program can also be designed according to the needs of each age group or population (Kiviranta et al., 2024; Nugraha et al., 2024; Remmen & Iversen, 2023; Sella et al., 2023).

Specifically, the Forest School project (pedagogical approach) is primarily aimed at younger children and is structured around free play, exploration of the environment, and sensory interaction (Sella et al., 2023), aspects that have proven effective in young people's learning process (Harris, 2026). Furthermore, the absence of high-risk challenges and the emphasis on motor, emotional, and social development also contribute to the effectiveness of these programs (Dabaja, 2022; Sella et al., 2023), unlike adventure programs, which target older populations and focus on overcoming personal limits (Puhakka, 2024). Regarding the longitudinal (annual) approach of the program, this aligns with previous experiences of outdoor learning in the educational field, suggesting that repetition and stability of sessions in natural environments promote consolidation and holistic development at an early age (Sella et al., 2023).

On the other hand, the Venture Trust, KOA Aventura, and Moc Warmii projects (transformative approach), applied to young people and adults over a medium- to long-term period, are structured around progressive physical and emotional challenges (Nugraha et al., 2024). This study also highlights the importance of combining these challenges with structured spaces for reflection and support (Dania et al., 2025). This type of activity aligns with Outdoor Learning proposals that emphasize the transformative potential of challenges in controlled contexts to develop resilience, self-confidence, and personal responsibility (Allan et al., 2025). The present study suggests that these types of programs are usually conceived as medium- to long-term initiatives and processes that extend from several months to a year (Aylward et al., 2025). This temporal distribution reinforces the recommendations of various studies that highlight the importance of temporal continuity to facilitate the transfer of learning to daily, educational and work life (Aylward et al., 2025).

For their part, the Die Seminarschneider and LIFE Trekking projects (with a professional focus) are aimed at working-age individuals and are structured around nature and adventure experiences explicitly geared towards developing transferrable skills, leadership, and personal effectiveness (van Droffelaar, 2025), in line with recent teacher and professional development programs that integrate outdoor learning (Dania et al., 2025; Simonsen et al., 2024). In this sense, unlike the study by Simonsen et al. (2024), where the experience was based solely on basic interaction with the natural environment, the present study suggests that more complex programs may be more effective. These programs include cooperative challenges, outdoor problem-solving, immersive micro-adventures, and hiking activities. Such activities can enrich the processes of transfer and guided reflection, which the literature identifies as key characteristics of experiential interventions (Vlček et al., 2025). The duration of these programs is shorter, especially in the case of LIFE Trekking (ten intensive days), unlike some existing programs that lasted up to 30 months (Dania et al., 2025). In this sense, the high intensity of the experiences and the pedagogical intent could compensate for this brevity (Aylward et al., 2025). It is worth noting that, in the study by Dania et al. (Dania et al., 2025) the participants were teachers with higher education, which suggests that their educational level and professional focus could be an influential variable.

Despite contextual differences, they all share common elements such as the intentional use of the natural environment, physical and cooperative experiences, guided reflection, and learning transfer. These constants suggest the existence of a common pattern of good practices (Kiviranta et al., 2024; Nugraha et al., 2024; Remmen & Iversen, 2023; Sella et al., 2023; Waite, 2020).

Regarding the study's limitations, the main one is that the research was based on publicly available online information, which may have excluded relevant non-digitized experiences. In some cases, the information available on the websites was limited, making

it difficult to compare all initiatives with the same depth of detail. Another limitation is that the study did not include direct empirical evaluation, observation, or interviews with participants or programme coordinators, which limits the generalizability of the results. However, this limitation is partly balanced by the qualitative richness of the selected cases and by their value as a starting point for future comparative research.

Future research should use more systematic designs and clearer evaluation criteria to compare outdoor learning initiatives across countries. It would also be useful to study the views of participants, educators, and programme coordinators, as well as to explore how long-term outcomes are related to programme design, context, and duration.

5. Conclusions

The results show that Outdoor Learning initiatives take different forms according to context, age group, and programme purpose. Across the selected cases, it is possible to identify three main orientations. The first is a transformative approach, more often linked to social inclusion and well-being, in which adventure and nature-based activities are combined with reflection and personal support. The second is a pedagogical approach, in which outdoor learning is used in lower-risk formats to support social skills, emotional development, and broader educational growth. The third is a professional approach, in which the focus is on leadership, competence development, and the transfer of learning to personal and working life. These orientations show that outdoor learning is not applied in a single way, but rather adapted to the needs, profiles, and purposes of each initiative.

The comparison also suggests that the age of participants and the goals of the programme influence the type of activities used. Younger groups tend to participate in more exploratory and educational experiences, young adults are more often involved in programmes related to social support and well-being, and adult groups are usually linked to initiatives with a stronger professional focus. In addition, programme duration seems to be related to the type of learning process being promoted. Medium- and long-term interventions appear to support more sustained change and greater continuity, while short-term experiences rely more on intensive and reflective activities.

Rather than identifying good or best practice, this study highlights common elements shared by the selected initiatives, such as the intentional use of natural environments, experiential learning, cooperative work, and guided reflection. These elements may help explain why outdoor learning is used in such different settings and for such different purposes. At the same time, the comparison shows that context matters, and that the same general approach can be adapted in different ways depending on the target group and the local environment.

Overall, this study contributes to a better understanding of how selected European Outdoor Learning initiatives are structured and how they relate to personal and social development. The findings do not aim to establish universal conclusions, but they do offer useful information for future comparative studies and for practitioners who want to design more context-sensitive outdoor learning experiences. Future research would benefit from more systematic designs, clearer evaluation criteria, and direct data from participants and programme coordinators.

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Abbreviation

The following abbreviation is used in this manuscript:

NGOs Non-Governmental Organizations

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